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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,350	09/16/2003	Susanne Dahl Thomsen	0459-0748P	2062

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BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER

GRAY, JILL M

ART UNIT	PAPER NUMBER
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1774

DATE MAILED: 02/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/662,350	THOMSEN ET AL.	
	Examiner	Art Unit	
	Jill M. Gray	1774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19, 22-29 and 31-36 is/are pending in the application.
- 4a) Of the above claim(s) 27-29 and 31-34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19, 22-26, 35 and 36 is/are rejected.*
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-19, 22-26 and 35-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Asanuma et al, 5,478,646 (Asanuma) in view of Gupta et al, 6,177,191 B1 (Gupta) and Schmalz 4,938,832, for reasons of record.

Asanuma and Gupta are each as applied previously, wherein Gupta teaches polypropylene fibers that can have a finish applied thereto, wherein the finish can be a polysiloxane or a composition of the type taught by Schmalz, 4,938,832, (note column 11, lines 4-21 and Examples 1A and 1B) but do not specifically teach that the finish has at least 25% of the active content being polysiloxane. Schmalz teaches a method for preparing a polyolefin containing fiber for processing comprising treating the fiber with a composition comprising a neutralized phosphoric acid ester and up to about 30% by weight of at least one polysiloxane, crimping the fiber and applying a second composition comprising about 70 to 100% by weight of at least one polysiloxane and up to about 30% by weight of a neutralized phosphoric acid ester, processing the treated fiber and forming into a web. See column 2, lines 10-54.

Though Asanuma and Gupta are silent as to at least 25% of the active content being polysiloxane, as set forth above, Gupta teaches that compositions of the type taught by Schmalz can be used. Accordingly, the combined teachings of Gupta and Schmalz would have rendered obvious coating the polypropylene fibers of Asanuma with a finish consisting essentially of a polysiloxane with at least 25% of the active content being polysiloxane. As to the fiber/fiber friction, because the prior art teaches the inclusion of a polysiloxane having the requisite amount of active content of

Art Unit: 1774

polysiloxane, the examiner has reason to believe that fiber/fiber friction of the prior art would be within the ranges contemplated by applicants.

Therefore, the combined teachings of Asanuma, Gupta and Schmalz would have rendered obvious the invention as claimed in present claims 1-19, 22-26, and 35-36.

2. Claims 1-19, 22-26 and 35-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Asanuma et al, 5,478,646 (Asanuma) as applied above to claims 1-19, 22-26, and 35-36 in view of Evans et al, 6,171,515 B1 (Evans), for reasons of record.

Asanuma is as set forth above but does not teach applying a spin finish to his fibers. Evans teaches a fiber treatment composition containing siloxanes that can be applied to fibers such as polyethylene and polypropylene. See abstract and column 7, lines 39-40. In addition, Evans teaches that the emulsion typically contains 2 to 80% of active ingredients and is applied to the fibers in an amount of 0.1 to 15 wt%. See column 6, lines 49-50 and column 7, lines 60-94. It would have been obvious to modify the fibers taught by Asanuma by applying a fiber treating composition as taught by Evans with the reasonable expectation of providing resistance to yellowing and imparting good hand to the fibers. As to the fiber/fiber friction, bulk, and resilience, Evans teaches adding the fiber treatment composition in amounts contemplated by applicants, wherein said fiber treatment is substantially similar to that of applicants. Accordingly, the examiner has reason to believe that properties such as the fiber/fiber friction, bulk, and resilience are within the present claimed range.

Therefore, the combined teachings of Asanuma and Evans would have rendered obvious the invention as claimed in present claims 1-19, 22-26, and 35-36.

Response to Arguments

3. Applicant's arguments filed December 8, 2005 have been fully considered but they are not persuasive.

Applicants argue that Schmalz pertains to a spin finish formed from an antistatic agent and that antistatic agents increase fiber/fiber friction and therefore, it is unlikely that the polyolefin fibers with a spin finish accordingly to Schmalz have a fiber/fiber friction falling with the claimed range.

In this regard, there is no factual evidence on this record to substantiate this allegation.

Applicants argue that a low fiber/fiber friction, such as that of the instant claims is not desirable in view of Gupta and as a result, Gupta teaches away from the present invention.

The examiner disagrees. In particular, Gupta specifically teaches at column 11, that an embodiment of his invention includes a finish applied to a fiber.

Applicants argue that the siloxanes of Evans are siloxane having amine and polyol functionalities and do not need to be emulsified, whereas the polysiloxanes of the present invention are applied as an emulsion, and thus the properties are very different.

In this regard, there is no factual evidence on this record to substantiate this allegation. Also, the claims are not limited to any type of polysiloxane.

No claims are allowed.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill M. Gray whose telephone number is 571-272-1524. The examiner can normally be reached on M-Th and alternate Fridays 10:30-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1774

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jill M. Gray
Primary Examiner
Art Unit 1774

jmg